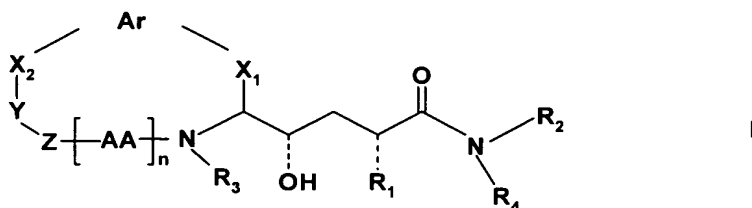


## Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the specification:

### List of Claims:

Claim 1. (original) A compound of formula I



wherein

R<sub>1</sub> is (C<sub>1-8</sub>)alkyl, (C<sub>1-4</sub>)alkoxy(C<sub>1-4</sub>)alkyl, hydroxy(C<sub>1-6</sub>)alkyl, (C<sub>1-4</sub>)alkylthio(C<sub>1-4</sub>)alkyl, (C<sub>1-6</sub>)alkenyl, (C<sub>3-7</sub>)cycloalkyl, (C<sub>3-7</sub>)cycloalkyl(C<sub>1-4</sub>)alkyl, piperidinyl or pyrrolidinyl,  
R<sub>2</sub> and R<sub>4</sub>, independently, are hydrogen or optionally substituted (C<sub>1-8</sub>)alkyl, (C<sub>3-7</sub>)cycloalkyl, (C<sub>3-7</sub>)cycloalkyl(C<sub>1-4</sub>)alkyl, aryl, aryl(C<sub>1-4</sub>)alkyl, heteroaryl or heteroaryl(C<sub>1-4</sub>)alkyl, or

R<sub>2</sub> and R<sub>4</sub>, together with the nitrogen to which they are attached, form an optionally substituted piperidino, pyrrolidinyl, morpholino or piperazinyl group,

R<sub>3</sub> is hydrogen or (C<sub>1-4</sub>)alkyl,

X<sub>1</sub> is CH<sub>2</sub>,

X<sub>2</sub> is CH<sub>2</sub>, O, S, CO, COO, OCO, NHCO, CONH, or NR, R being hydrogen or (C<sub>1-4</sub>)alkyl,

Y is (C<sub>1-8</sub>)alkylen or (C<sub>1-8</sub>)alkylenoxy(C<sub>1-6</sub>)alkylen, (C<sub>1-8</sub>)alkenylen or (C<sub>1-8</sub>)alkenylenoxy(C<sub>1-6</sub>)alkylen,

Ar is a phenyl ring optionally mono- di- or trisubstituted by, independently, hydroxy or halogen, whereby X<sub>1</sub> and X<sub>2</sub> are in meta or para position to each other,

and either

Z is CO,

AA is a natural or unnatural alpha-amino-acid, and

n is 0 or 1,

or

Z is SO<sub>2</sub>,

AA is an optionally substituted ethylencarbonyl group (derived from a natural or unnatural alpha-amino acid by replacement of the nitrogen by a methylen group), and  
 n is 1  
 in free base or acid addition salt form.

Claim 2. (original) A compound of formula I according to claim 1, wherein

- R<sub>1</sub> is (C<sub>1-8</sub>)alkyl, (C<sub>1-4</sub>)alkoxy(C<sub>1-4</sub>)alkyl, hydroxy(C<sub>1-6</sub>)alkyl, (C<sub>1-4</sub>)alkylthio(C<sub>1-4</sub>)alkyl, (C<sub>1-6</sub>)alkenyl, (C<sub>3-7</sub>)cycloalkyl, (C<sub>3-7</sub>)cycloalkyl(C<sub>1-4</sub>)alkyl, piperidinyl or pyrrolidinyl,  
 R<sub>2</sub> and R<sub>4</sub>, independently, are  
 (a) hydrogen  
 (b) (C<sub>1-8</sub>)alkyl, (C<sub>3-7</sub>) cycloalkyl or (C<sub>3-7</sub>)cycloalkyl(C<sub>1-4</sub>)alkyl, in each case optionally substituted by one to three groups selected from hydroxy, hydroxy(C<sub>1-4</sub>)alkyl, (C<sub>1-4</sub>)alkoxy, (C<sub>1-4</sub>)alkoxy(C<sub>1-4</sub>)alkyl, (C<sub>1-4</sub>)alkoxy(C<sub>1-4</sub>)alkoxy, (C<sub>1-4</sub>)alkylsulfanyl, (C<sub>1-4</sub>)alkoxycarbonyl, (C<sub>1-4</sub>)alkylcarbonyloxy, (C<sub>1-4</sub>)alkylcarbonylamino, (C<sub>1-4</sub>)alkylcarbonyl, (C<sub>1-4</sub>)sulfonyl, cyano, oxo, hetero (C<sub>3-7</sub>)cycloalkyl or heteroaryl, or  
 (c) aryl, aryl(C<sub>1-4</sub>)alkyl, heteroaryl or heteroaryl(C<sub>1-4</sub>) alkyl, wherein in the latter two radicals heteroaryl denotes an aromatic 5- or 6- membered ring in which 1, 2 or 3 atoms are heteroatoms independently selected from O, N and S, wherein all radicals are optionally substituted by one to three groups selected from halogen, hydroxy, cyano, trifluoromethyl, carboxy, (C<sub>1-4</sub>)alkyloxycarbonyl, (C<sub>1-4</sub>)alkylcarbonyl, (C<sub>1-4</sub>)alkylsulfonyl, (C<sub>1-4</sub>)alkylcarbonyloxy, (C<sub>1-4</sub>)alkylcarbonyl, (C<sub>1-4</sub>)alkyl, (C<sub>1-4</sub>)alkoxy or hydroxy(C<sub>1-4</sub>)alkyl, or  
 R<sub>2</sub> and R<sub>4</sub>, together with the nitrogen to which they are attached, form an piperidino, pyrrolidinyl, morpholino or piperazinyl group, each of which is optionally substituted by one to three groups selected from hydroxy, hydroxy(C<sub>1-4</sub>)alkyl, (C<sub>1-4</sub>)alkoxy, (C<sub>1-4</sub>)alkoxy(C<sub>1-4</sub>)alkyl, (C<sub>1-4</sub>)alkoxy(C<sub>1-4</sub>)alkoxy, (C<sub>1-4</sub>)alkylsulfanyl, (C<sub>1-4</sub>)alkoxycarbonyl, (C<sub>1-4</sub>)alkylcarbonyloxy, (C<sub>1-4</sub>)alkylcarbonylamino, (C<sub>1-4</sub>)alkylcarbonyl, (C<sub>1-4</sub>)sulfonyl, cyano, oxo, hetero (C<sub>3-7</sub>)cycloalkyl or heteroaryl,  
 R<sub>3</sub> is hydrogen or (C<sub>1-4</sub>)alkyl,  
 X<sub>1</sub> is CH<sub>2</sub>,  
 X<sub>2</sub> is CH<sub>2</sub>, O, S, CO, COO, OCO, NHCO, CONH, or NR, R being hydrogen or (C<sub>1-4</sub>)alkyl,  
 Y is (C<sub>1-8</sub>)alkylen or (C<sub>1-8</sub>)alkylenoxy(C<sub>1-6</sub>)alkylen, (C<sub>1-8</sub>)alkenylen or (C<sub>1-8</sub>)alkenylenoxy(C<sub>1-6</sub>)alkylen,  
 Ar is a phenyl ring optionally mono- di- or trisubstituted by, independently, hydroxy or halogen, whereby X<sub>1</sub> and X<sub>2</sub> are in meta or para position to each other,  
 and either

Z is CO,  
 AA is a natural or unnatural alpha-amino-acid, and  
 n is 0 or 1,  
 or  
 Z is SO<sub>2</sub>,  
 AA is an optionally substituted ethylencarbonyl group (derived from a natural or  
 unnatural alpha-amino acid by replacement of the nitrogen by a methylen group),  
 and  
 n is 1  
 in free base or acid addition salt form.

Claim 3. (original) A compound of formula I according to claim 1, wherein

R<sub>1</sub> is (C<sub>1-4</sub>)alkyl,  
 R<sub>2</sub> is (C<sub>1-6</sub>)alkyl,  
 R<sub>3</sub> is hydrogen or (C<sub>1-4</sub>)alkyl,  
 R<sub>4</sub> is hydrogen,  
 X<sub>1</sub> is CH<sub>2</sub>,  
 X<sub>2</sub> is CH<sub>2</sub> or O,  
 Y is (C<sub>1-8</sub>)alkylen,  
 Ar is unsubstituted phenylen, whereby X<sub>1</sub> and X<sub>2</sub> are in meta position to each other,  
 and either  
 Z is CO,  
 AA is a natural or unnatural alpha-amino-acid, and  
 n is 0 or 1,  
 or  
 Z is SO<sub>2</sub>,  
 AA is an optionally substituted ethylencarbonyl group (derived from a natural or unnatural  
 alpha-amino acid by replacement of the nitrogen by a methylen group), and  
 n is 1  
 in free base or acid addition salt form.

Claim 4. (currently amended) A compound of formula I according to ~~any one of~~ claims 1 to 3,  
 wherein

R<sub>1</sub> is (C<sub>1-4</sub>)alkyl,  
 R<sub>2</sub> is (C<sub>1-6</sub>)alkyl,  
 R<sub>3</sub> is hydrogen or (C<sub>1-4</sub>)alkyl,  
 R<sub>4</sub> is hydrogen,  
 X<sub>1</sub> is CH<sub>2</sub>,

in free base or acid addition salt form.

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wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, X<sub>1</sub>, X<sub>2</sub>, Ar and AA are as defined in claim I and L<sub>1</sub> and L<sub>2</sub>, independently are alkylen or alkyleneoxyalkylen groups, or

c) for the production of a compound of formula I wherein Z is SO<sub>2</sub> and Y is (C<sub>1-8</sub>) alkylen or (C<sub>1-8</sub>)alkyleneoxy(C<sub>1-6</sub>)alkylen, hydrogenation of a compound of formula I wherein Z is SO<sub>2</sub> and Y is (C<sub>1-8</sub>)alkenylen or (C<sub>1-8</sub>)alkyleneoxy(C<sub>1-6</sub>)alkylen,

and recovering the so obtained compound of formula I in free base or acid addition salt form.

Claim 6. (currently amended) A compound according to ~~any one of~~ claims 1 ~~to~~ 4 in free base or pharmaceutically acceptable acid addition salt form, for use as a pharmaceutical.

Claim 7. (currently amended) A compound according to ~~any one of~~ claims 1 ~~to~~ 4 in free base or pharmaceutically acceptable acid addition salt form, for use in the treatment of neurological and vascular disorders related to beta-amyloid generation and/or aggregation.

Claim 8. (currently amended) A pharmaceutical composition comprising a compound according to ~~any one of~~ claims 1 ~~to~~ 4 in free base or pharmaceutically acceptable acid addition salt form, in association with a pharmaceutical carrier or diluent.

Claim 9. (currently amended) The use of a compound according to ~~any one of~~ claims 1 ~~to~~ 4 in free base or pharmaceutically acceptable acid addition salt form, as a pharmaceutical, for the treatment of neurological and vascular disorders related to beta-amyloid generation and/or aggregation.

Claim 10. (cancelled)

Claim 11. (currently amended) A method for the treatment of neurological and vascular disorders related to beta-amyloid generation and/or aggregation in a subject in need of such treatment, which comprises administering to such subject a therapeutically effective amount of a compound according to ~~any one of~~ claims 1 ~~to~~ 4 in free base or pharmaceutically acceptable acid addition salt form.

Claim 12. (currently amended) A combination comprising a therapeutically effective amount of a compound according to ~~any one of~~ claims 1 ~~to~~ 4 in free base or pharmaceutically acceptable acid addition salt form and a second drug substance, for simultaneous or sequential administration.